Characteristics of Transgender Individuals With Emergency Department Visits and Hospitalizations for Mental Health

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Objective: Transgender individuals experience significant oppression resulting in mental health disparities. Factors associated with their need for acute mental health care are unknown. This study compared characteristics of transgender individuals who presented for acute mental health care with population-based comparison samples.

Methods: This cross-sectional study examined transgender individuals who had a mental health–related emergency department (ED) visit (N=728) or hospitalization (N=454). Transgender individuals were identified, and their data were linked with health administrative data. The transgender ED and hospitalization samples were each compared with two samples: all individuals in Ontario who had an ED visit or hospitalization (unmatched) and individuals matched on age, region of residence, and mental health care utilization history. Individuals' sociodemographic and clinical factors were compared.

Results: After matching, transgender individuals in the ED sample were more likely than those in the comparison group to be in the lowest neighborhood income quintile (37% versus 27%) and the highest residential instability quintile (47% versus 38%) and to be diagnosed as having a mood (26% versus 19%) or personality disorder (4% versus 1%). Transgender individuals in the hospitalization sample were more likely to be in the lowest neighborhood income quintile (36% versus 27%) and the highest residential instability quintile (45% versus 35%) and to be diagnosed as having a mood (40% versus 35%) or personality disorder (5% versus 2%).

Conclusions: Transgender individuals who accessed acute mental health care had unique sociodemographic and clinical factors associated with their presentation that persisted after matching. More research into the factors associated with their acute care presentation is warranted, including how experiences of marginalization play a role.

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Transgender people are individuals whose gender identity differs from their sex assigned at birth (1). They are estimated to represent at least 0.5% of the population globally (2, 3). International studies have found a two- to fivefold increase in diagnoses of depression and anxiety among transgender people compared with cisgender individuals (3–5), with 10-fold increases in the rate of suicide attempts (3, 6). High rates of mental illness, substance use, and suicidality are related to experiences of marginalization and oppression, including experiences of transphobia, violence, lack of social support, barriers to education, homelessness, and unemployment (3, 7–9). The minority stress model posits that those with marginalized identities, including transgender people, face chronically high levels of stress due to discrimination, which leads to increased rates and severity of general medical and mental illness (7, 8, 10, 11).

HIGHLIGHTS

- Indicators of socioeconomic marginalization (living in areas of low income and high residential instability and material deprivation) were associated with samples of transgender individuals who had a mental health–related emergency department (ED) visit or hospitalization.
- Transgender individuals who presented for a psychiatric ED visit were more likely to be diagnosed as having a mood or personality disorder and less likely to have a substance-related disorder than were individuals in population-based comparison groups.
- Transgender individuals who had a psychiatric hospitalization were more likely to be admitted for a mood or personality disorder and less likely to be admitted for a psychotic or substance-related disorder than were individuals in population-based comparison groups.

Higher rates of mental illness among transgender individuals likely produce greater need for acute mental health care, including emergency department (ED) visits and hospitalizations. Health administrative data can be useful to examine patterns of mental health care access for populations. Recent studies have explored transgender patients' use of mental health care by using health administrative data in the United States and Canada (12–16). Studies have found that transgender individuals were more likely to have had psychiatric outpatient visits, hospitalizations, and ED visits (12–16) than were cisgender people. However, these studies have had several important limitations. One limitation was the use of *ICD-9* diagnoses (gender identity disorders) and involvement with medical transition to identify transgender individuals in several U.S. studies (12, 13). These methods are not representative of many transgender people without these diagnoses and many who do not seek medical transition (i.e., gender-affirming hormone therapy or surgeries). One U.S. study used a convenience sample from one site, which often confers selection bias (14).

None of the prior studies clarified the factors and individual characteristics associated with the increased need for acute mental health care. Examining factors associated with this need can highlight contributors to mental illness that are amenable to intervention to improve mental health care for transgender people. Using linked health administrative data, this study aimed to compare characteristics of transgender individuals who had had a psychiatric hospitalization or ED visit in Ontario, Canada, with characteristics of population-based comparison samples.

METHODS

Design and Setting

This cross-sectional study used linked health administrative data to compare characteristics of transgender individuals who had a psychiatric ED visit or a psychiatric hospitalization in Ontario with characteristics of individuals in the general population of acute psychiatric care users. This project was conducted by using linked health administrative data held at ICES. ICES is an independent, nonprofit research institute. Its legal status under Ontario's health information privacy law allows it to collect and analyze health care and demographic data, without consent, for the purposes of health system evaluation, planning, and monitoring. The use of data in this project was authorized under section 45 of Ontario's Personal Health Information Protection Act, which does not require review by a research ethics board. The linkage of external data to ICES for this project was approved by the research ethics board at the University of Toronto (Research Information System protocol 38210).

Data Sources

The ICES data repository includes individual-level longitudinal data on most publicly funded health care services for individuals covered by Ontario health insurance. These data sets were linked by using unique encoded identifiers and were analyzed at ICES. Data resources used in this study included the Registered Persons Database, which includes demographic information for all individuals in Ontario with a health card number. The Ontario Health Insurance Plan database includes physician billing information. The National Ambulatory Care Reporting System contains information about ED visits. The Ontario Mental Health Reporting System database includes information from psychiatric hospitalizations in hospital beds designated for mental health care. The Hospital Discharge Abstract Database captures information from medical hospitalizations in nonmental health hospital beds. The Ontario Marginalization Index (ON-Marg) is a provincial adaptation of the Canadian Marginalization Index and uses the smallest census area–level data to create validated variables measuring multidimensional aspects of marginalization through four dimensions: dependency, residential instability, material deprivation, and ethnic concentration (17).

Study Population

All individuals age ≥16 who were discharged from a psychiatric hospitalization (hospitalized sample) or mental health–related ED visit (ED sample) in Ontario between January 1, 2012, and December 31, 2018, were eligible to be in the study population. The index discharge date was the individual's first discharge within the period. Patients were excluded if they were not Ontario residents, did not have a valid health card number for data linkage, or were missing valid data for discharge diagnosis, age, or their Ontario region of residence (i.e., Local Health Integration Network [LHIN]) during the study period.

Identifying Transgender Individuals

Transgender individuals were systematically identified through data obtained from electronic medical records (EMRs) of four outpatient health clinics in three cities across Ontario (Thunder Bay, Ottawa, Toronto). Each patient was asked to describe their gender identity by answering questions on the clinic's intake form. The manager of health information at each clinic identified all transgender patients from 2012 to 2016 through their EMR. Individuals' Ontario health insurance number and date of birth were used to link individuals to administrative databases at ICES. This process has been previously described (16). All transgender individuals were identified from the study population and included in the two transgender samples in this study.

Comparison Groups

Two comparison groups were created for each sample of transgender individuals to understand the ways in which the transgender population differs from the general Ontario population of acute care users (unmatched) and from a cisgender population from the same regions with similar demographic characteristics and history of mental health

care (matched). In each matched comparison group, four individuals from the comparison group were found to match with each transgender individual on the basis of shared age, region of residence, and mental health care utilization history. Region of residence was a variable identifying in which of 14 LHINs the individual resided. LHINs are the health authorities responsible for regional administration of public health care services in Ontario. Individuals were placed into four categories of mental health care utilization history on the basis of their mental health service use in the 24 months prior: having any psychiatric hospitalization history, having no psychiatric hospitalization but any psychiatric ED visit history, having no history of psychiatric hospitalization or ED visit but any outpatient mental health visit history, or having none of the above. This categorization strategy uses patient's use of acute psychiatric care to approximate the severity of prior mental illness (18).

Variables

The following sociodemographic variables were measured for each group: age, LHIN, rurality (derived from postal code), neighborhood-level income (measured in quintiles at the census tract level), and ON-Marg quintiles. Gender identity was not included because of the high proportion of records with unknown gender in the transgender sample (16). The clinical diagnosis for the ED visit or hospitalization was captured in one of seven psychiatric diagnostic categories used in previous studies (19). Prior health service use variables captured the number of prior mental health–related ED visits, hospitalizations, outpatient visits, and self-harm–related ED visits or hospitalizations in the 24 months before the index admission date.

Statistical Analysis

Descriptive and baseline characteristics (frequencies and means) were calculated across both samples. Differences between samples were explored by using chi-square tests and Student's t tests, as appropriate. Statistical significance comparing samples was set to $p<0.05$ in two-tailed tests. All analyses were conducted with SAS, version 9.4.

RESULTS

Transgender ED Sample

Comparing the transgender ED sample (N=728) with the unmatched general population of ED users (N=581,708), we found that the transgender ED sample was younger (mean±SD age=28.8±11.7 versus 38.3±18.1, t=21.90, df=731, $p<0.001$) and less rural (3% versus 14.4%, $\chi^2=79.64$, N=580,768, df=1, $p<0.001$). They were more likely to be in the lowest quintile for neighborhood income (37% versus 27.6%, $\chi^2=30.91$, N=582,436, df=5, $p<0.001$) and dependency (30% versus 23.2%, $\chi^2=37.95$, N=571,637, df=4, $p<0.001$) and in the highest quintile for residential instability (47% versus 29.2%, $\chi^2=118.47$, N=571,637, df=4, $p<0.001$), material deprivation (33% versus 27.6%, $\chi^2=9.58$, N=571,637, df=4, p=0.048), and ethnic concentration (29% versus 22.1%, $\chi^2=78.78$, N=571,637, df=4, $p<0.001$) (Table 1). The transgender ED sample was more likely than the unmatched general population of ED users to be diagnosed as having a mood disorder (26% versus 15.6%), schizophrenia or psychotic disorder (5% versus 3.4%), personality disorder (4% versus 0.7%), and deliberate self-harm (7% versus 5.2%) ($\chi^2=208.83$, N=582,436, df=6, $p<0.001$) (Table 2). They were less likely to be diagnosed as having an anxiety, trauma, or obsessive-compulsive–related disorder (38% versus 46.0%) or a substance-related disorder (14% versus 25.0%). The transgender ED sample had much greater prior psychiatric service use than did the sample of unmatched general population of ED users, including having more prior hospitalizations (21% versus 8.1%, $\chi^2=172.73$, N=582,436, df=1, $p<0.001$), ED visits (16% versus 9.9%, $\chi^2=30.27$, N=582,436, df=1, $p<0.001$), outpatient visits (83% versus 57.3%, $\chi^2=198.21$, N=582,436, df=1, $p<0.001$), and visits for deliberate self-harm (7% versus 2.3%, $\chi^2=81.92$, N=582,436, df=1, $p<0.001$) (Table 3).

Comparing the transgender ED sample with the matched comparison sample of ED users (N=2,912), we found that no significant differences persisted after matching in the dependency or ethnic concentration quintiles. However, the transgender ED sample remained more likely than the matched comparison sample of ED users to be in the lowest neighborhood income quintile (37% versus 27%, $\chi^2=31.00$, N=3,640, df=5, $p<0.001$), highest residential instability quintile (47% versus 38%, $\chi^2=32.17$, N=3,574, df=4, $p<0.001$), and highest material deprivation quintile (33% versus 26%, $\chi^2=19.19$, N=3,574, df=4, $p<0.001$) (Table 1). The transgender ED sample remained more likely than the matched comparison sample of ED users to be diagnosed as having a mood disorder (26% versus 19%) or personality disorder (4% versus 1%) and less likely to be diagnosed as having a substance-related disorder (14% versus 25%) ($\chi^2=66.33$, N=3,640, df=6, $p<0.001$) (Table 2). The differences in diagnoses of anxiety, trauma, or obsessive-compulsive–related disorders and psychotic disorders did not persist after matching. None of the differences in prior mental health service utilization between the transgender ED sample and the unmatched general population of ED users persisted after matching, except that the transgender ED sample still had more prior self-harm (7% versus 5%, $\chi^2=3.98$, N=3,640, df=1, p=0.046) (Table 3).

Transgender Hospitalized Sample

Comparing the transgender hospitalized sample (N=454) with the unmatched general population of hospitalized individuals (N=217,507), we found that the transgender hospitalized sample was younger (age=28.3±11.9 versus 40.9±18.5, t=22.30, df=458, $p<0.001$) and less rural (4% versus 12.4%, $\chi^2=31.07$, N=217,454, df=1, $p<0.001$). They were more likely to be in the lowest quintile for neighborhood income (36% versus 28.8%, $\chi^2=19.10$, N=217,961, df=5, p=0.002) and dependency (30% versus 22.2%, $\chi^2=35.07$, N=214,496,

TABLE 1. Sociodemographic characteristics of the transgender group and two comparison groups, by mental health care utilization[a]

Characteristic	Transgender ED sample (N=728)		Unmatched comparison sample (N=581,708)			Matched comparison sample (N=2,912)		
	N	%	N	%	p[b]	N	%	p[b]
Age at admission (M±SD)	28.8±11.7		38.3±18.1		<.001	29.0±11.7		.76
Rural residence					<.001			<.001
Rural (population <10,000)	20	3	83,604	14.4		247	9	
Urban (population ≥10,000)	704	97	496,440	85.3		2,653	91	
Neighborhood income quintile					<.001			<.001
Q1 (poorest)	266	37	160,320	27.6		774	27	
Q2	139	19	123,313	21.2		563	19	
Q3	110	15	108,753	18.7		518	18	
Q4	105	14	97,229	16.7		517	18	
Q5 (wealthiest)	103	14	88,884	15.3		518	18	
ON-Marg dependency quintile					<.001			.67
Q1 (least dependent)	216	30	135,070	23.2		901	31	
Q2	167	23	113,131	19.4		706	24	
Q3	137	19	103,316	17.8		508	17	
Q4	94	13	102,665	17.6		355	12	
Q5 (most dependent)	106	15	116,735	20.1		384	13	
ON-Marg residential instability quintile					<.001			<.001
Q1 (least unstable)	70	10	86,013	14.8		405	14	
Q2	61	8	91,172	15.7		385	13	
Q3	110	15	101,314	17.4		414	14	
Q4	138	19	122,734	21.1		556	19	
Q5 (most unstable)	341	47	169,684	29.2		1,094	38	
ON-Marg material deprivation quintile					.048			<.001
Q1 (least deprived)	108	15	89,744	15.4		580	20	
Q2	113	16	98,194	16.9		466	16	
Q3	119	16	105,155	18.1		517	18	
Q4	141	19	117,440	20.2		538	19	
Q5 (most deprived)	239	33	160,384	27.6		753	26	
ON-Marg ethnic concentration quintile					<.001			.78
Q1 (lowest ethnic concentration)	77	11	112,499	19.3		336	12	
Q2	92	13	109,298	18.8		395	14	
Q3	145	20	106,611	18.3		567	20	
Q4	196	27	114,077	19.6		775	27	
Q5 (highest ethnic concentration)	210	29	128,432	22.1		781	27	
	Transgender hospitalized sample (N=454)		**Unmatched comparison sample (N=217,507)**			**Matched comparison sample (N=1,808)**		
Age at admission (M±SD)	28.3±11.9		40.9±18.5		<.001	28.3±11.9		.97
Rural residence					<.001			.02
Rural (population <10,000)	17	4	26,927	12.4		122	7	
Urban (population ≥10,000)	435	96	190,075	87.4		1,682	93	
Neighborhood income quintile					.002			<.001
Q1 (poorest)	163	36	62,642	28.8		481	27	
Q2	108	24	46,543	21.4		360	20	
Q3	71	16	39,429	18.1		337	19	
Q4	52	12	35,325	16.2		284	16	
Q5 (wealthiest)	57	13	32,509	14.9		331	18	
ON-Marg dependency quintile					<.001			.18
Q1 (least dependent)	137	30	48,244	22.2		567	31	
Q2	98	22	42,602	19.6		406	23	
Q3	95	21	39,060	18.0		303	17	
Q4	52	12	38,522	17.7		258	14	
Q5 (most dependent)	66	15	45,620	21.0		243	13	
ON-Marg residential instability quintile					<.001			<.001
Q1 (least unstable)	47	10	30,277	13.9		258	14	
Q2	38	8	33,062	15.2		249	14	

continued

TABLE 1, *continued*

	Transgender hospitalized sample (N=454)		Unmatched comparison sample (N=217,507)			Matched comparison sample (N=1,808)		
Q3	60	13	36,933	17.0		283	16	
Q4	97	21	45,864	21.1		360	20	
Q5 (most unstable)	206	45	67,912	31.2		627	35	
ON-Marg material deprivation quintile					.34			.023
Q1 (least deprived)	70	15	32,255	14.8		321	18	
Q2	64	14	35,500	16.3		318	18	
Q3	71	16	38,705	17.8		321	18	
Q4	96	21	44,368	20.4		355	20	
Q5 (most deprived)	147	32	63,220	29.1		462	26	
ON-Marg ethnic concentration quintile					<.001			.94
Q1 (lowest ethnic concentration)	42	9	41,010	18.9		182	10	
Q2	60	13	41,801	19.2		245	14	
Q3	79	17	40,709	18.7		330	18	
Q4	125	28	42,364	19.5		485	27	
Q5 (highest ethnic concentration)	142	31	48,164	22.1		535	30	

[a] The two comparison samples used to match the transgender sample included an unmatched group and a group matched 1:4 by age, Local Health Integration Network, and mental health care utilization history. ED, emergency department; ON-Marg, Ontario Marginalization Index.
[b] Compared with transgender sample.

df=4, p<0.001) and in the highest quintile for residential instability (45% versus 31.2%, χ^2=50.75, N=214,496, df=4, p<0.001) and ethnic concentration (31% versus 22.1%, χ^2=63.07, N=214,496, df=4, p<0.001) (Table 1). The transgender hospitalized sample was more likely than the unmatched general population of hospitalized individuals to be diagnosed as having a mood disorder (40% versus 35.6%) or personality disorder (5% versus 1.8%) (χ^2=74.46, N=217,961, df=6, p<0.001) (Table 2). They were less likely to be diagnosed as having schizophrenia or a psychotic disorder (13% versus 16.5%) or substance-related disorder (12% versus 20.9%). The transgender hospitalized sample had much greater prior psychiatric service use than did the unmatched general population of hospitalized individuals, including having more prior hospitalizations (16% versus 12.0%, χ^2=8.11, N=217,961, df=1, p=0.004), ED visits (47% versus 33.0%, χ^2=40.66, N=217,961, df=1, p<0.001), outpatient visits (89% versus 76.0%, χ^2=44.58, N=217,961, df=1,

TABLE 2. Diagnoses of the transgender group and two comparison groups, by mental health care utilization[a]

	Transgender ED sample (N=728)		Unmatched comparison sample (N=581,708)		Matched comparison sample (N=2,912)	
Diagnosis	N	%	N	%	N	%
Mood disorders[b]	191	26	90,528	15.6	566	19
Anxiety, trauma/stressor, and obsessive-compulsive–related disorders	278	38	267,868	46.0	1,112	38
Schizophrenia and psychotic disorders	36	5	19,874	3.4	148	5
Substance-related disorders	98	14	145,610	25.0	729	25
Personality disorders	26	4	4,013	.7	42	1
Deliberate self-harm	54	7	30,053	5.2	188	7
Other mental disorders	45	6	23,762	4.1	127	4
	Transgender hospitalized sample (N=454)		Unmatched comparison sample (N=217,507)		Matched comparison sample (N=1,808)	
Mood disorders[b]	182	40	77,346	35.6	626	35
Anxiety, trauma/stressor, and obsessive-compulsive–related disorders	63	14	29,779	13.7	273	15
Schizophrenia and psychotic disorders	60	13	35,968	16.5	335	19
Substance-related disorders	54	12	45,363	20.9	324	18
Personality disorders	24	5	3,889	1.8	41	2
Deliberate self-harm	23	5	12,962	6.0	107	6
Other mental disorders	48	11	12,200	5.6	102	6

[a] The two comparison samples used to match the transgender sample included an unmatched group and a group matched 1:4 by age, Local Health Integration Network, and mental health care utilization history. ED, emergency department.
[b] p<.001 for all comparisons, derived from χ^2 tests comparing the comparison samples with the transgender sample.

TABLE 3. Prior mental health service use for the transgender group and two comparison groups, by mental health care utilization[a]

Service use	Transgender ED sample (N=728)		Unmatched comparison sample (N=581,708)			Matched comparison sample (N=2,912)		
	N	%	N	%	p[b]	N	%	p[b]
Mental health hospitalizations in past 2 years								
Any	156	21	47,178	8.1	<.001	624	21	1.00
M±SD	.4±1.1		.1±.6		<.001	.4±1.0		.27
Mental health ED visits in past 2 years								
Any	116	16	57,306	9.9	<.001	425	15	.36
M±SD	.3±1.4		.2±.9		.001	.3±1.0		.19
Mental health outpatient visits in past 2 years								
Any	605	83	333,198	57.3	<.001	2,420	83	1.00
M±SD	9.1±12.7		4.9±11.8		<.001	8.3±15.5		.16
Nonfatal self-harm in past 2 years								
Any	53	7	13,216	2.3	<.001	156	5	.046
M±SD	.1±.6		.0±.3		<.001	.1±.4		.05
	Transgender hospitalized sample (N=454)		Unmatched comparison sample (N=217,507)			Matched comparison sample (N=1,808)		
Mental health hospitalizations in past 2 years								
Any	74	16	26,009	12.0	.004	288	16	.85
M±SD	.3±1.0		.2 ±.7		.02	.2 ±.8		.32
Mental health ED visits in past 2 years								
Any	214	47	71,871	33.0	<.001	814	45	.42
M±SD	1.1±2.2		.7±2.3		<.001	.9±1.8		.06
Mental health outpatient visits in past 2 years								
Any	406	89	165,400	76.0	<.001	1,624	90	.80
M±SD	10.7±13.0		8.5±15.0		<.001	10.1±15.8		.38
Nonfatal self-harm in past 2 years								
Any	37	8	12,379	5.7	.024	132	7	.54
M±SD	.1 ±.5		.1 ±.4		.05	.1 ±.4		.29

[a] The two comparison samples used to match the transgender sample included an unmatched group and a group matched 1:4 by age, Local Health Integration Network, and mental health care utilization history. ED, emergency department.
[b] Compared with transgender sample.

$p<0.001$), and visits for deliberate self-harm (8% versus 5.7%, $\chi^2=5.10$, N=217,961, df=1, $p=0.024$) (Table 3).

Comparison of the transgender hospitalized sample with the matched comparison sample of hospitalized individuals (N=1,808) revealed no persistent differences in the dependency or ethnic concentration quintiles. However, the transgender hospitalized sample remained more likely to be in the lowest neighborhood income quintile (36% versus 27%, $\chi^2=27.02$, N=2,262, df=5, $p<0.001$) and the highest residential instability quintile (45% versus 35%, $\chi^2=25.48$, N=2,225, df=4, $p<0.001$). The transgender hospitalized sample was more likely to be in the highest material deprivation quintile than the matched comparison sample of hospitalized individuals (32% versus 26%, $\chi^2=11.36$, N=2,225, df=4, $p=0.023$) (Table 1). The transgender hospitalized sample remained more likely than the matched comparison sample of hospitalized individuals to be diagnosed as having a mood (40% versus 35%) or personality disorder (5% versus 2%) and less likely to be diagnosed as having schizophrenia or a psychotic disorder (13% versus 19%) or substance-related disorder (12% versus 18%) ($\chi^2=42.42$, N=2,262, df=6, $p<0.001$) (Table 2). None of the differences in prior mental health service utilization between the transgender hospitalized sample and the unmatched general population of hospitalized individuals persisted after matching (Table 3).

DISCUSSION

Compared with the unmatched comparison group presenting for acute mental health care, transgender individuals in our samples were younger, were more likely to experience marginalization, had different diagnostic patterns for their acute mental health care presentation, and had more prior mental health care utilization (as an outpatient, in the ED, and for hospitalization). Matching was required to isolate the unique contribution of transgender status on sociodemographic and clinical factors that were not adequately explained by differences in age, region of residence, and prior mental health care utilization. Even after matching, data indicated that transgender individuals were more likely to live in lower-income neighborhoods and areas of greater residential instability and material deprivation. Transgender individuals were more likely to be diagnosed as having a

mood disorder and twice as likely to be diagnosed as having a personality disorder during their acute mental health care presentation. They were less likely to be diagnosed as having a substance-related disorder and, among those who were hospitalized, less likely to be diagnosed as having a psychotic disorder. Transgender individuals in the ED sample were more likely to have presented to acute care for self-harm, even after we accounted for other differences in mental health care use through matching.

The diagnostic patterns in the transgender samples are consistent with the two- to fivefold higher prevalence of depression among transgender individuals than in the general population (3–5, 14, 15). Although transgender individuals also have increased rates of anxiety- and trauma-related disorder diagnoses (3, 14, 15, 20), this pattern was not reflected in our results. The multifold increase in personality disorder diagnoses we found in the transgender samples in this study may be partially explained by the minority stress model (11, 21). Symptoms and behaviors consistent with diagnostic criteria of borderline personality disorder may be better understood as reactions to stress and oppression experienced by members of minority groups (21, 22). A society that subscribes to a rigid sex-gender binary viewpoint (23), where transgender individuals are regularly misgendered and face daily discrimination and marginalization, creates environments that can produce such symptoms and behaviors in response. Diagnosis of borderline personality disorder is also prone to health care provider bias (24, 25), which may have influenced our results. Furthermore, transgender people are frequently pathologized, and those seeking medical transition are required to have a mental health assessment, both of which can lead to psychiatric diagnoses (26).

Our study provides evidence for an association between acute mental health care utilization and increased measures of marginalization in the transgender samples. Our study echoes previous U.S. research, which found that transgender inpatients were more likely to be in the lowest neighborhood income quartile than were cisgender inpatients (15), and extends that finding to transgender individuals presenting to the ED for mental health care. Our study clarifies that residential instability and material deprivation disproportionately affect transgender individuals presenting for acute psychiatric care. Residential instability refers to high rates of family or housing instability, whereas material deprivation assesses indicators of poverty and difficulty accessing basic material needs (27). That these findings were persistent after matching adds strength to the possibility that experiences of marginalization are an important contributor to acute mental health care utilization for transgender individuals. This possibility is consistent with evidence that high rates of mental illness among transgender people are associated with elevated rates of homelessness, unemployment, and poverty (3, 7, 8, 28, 29).

A strength of the study was the use of two comparison samples: one unmatched and one matched on key characteristics. This method allowed for an understanding of the ways transgender individuals differ from samples from the general population who access acute mental health care and of the unique contributions of transgender status to sociodemographic and clinical factors associated with acute mental health care presentation. The large sample of transgender individuals also allowed for adequate power to examine differences in multiple characteristics associated with psychiatric hospitalizations and ED visits for this population. In total, the unmatched samples are inclusive of nearly every psychiatric hospitalization and ED visit in Ontario within the study period. Unlike previous studies that have relied on diagnostic definitions and involvement with medical transition to identify transgender individuals (12, 13), the current study used self-reported gender identities to identify individuals, which is more representative of the total transgender population.

This study had several limitations. Transgender individuals were identified from clinics in larger cities, which may not be representative of individuals in smaller cities and rural areas. Because the unmatched comparison groups represented all regions in Ontario, geographic variation in psychiatric service availability and utilization may have affected results. Matching was thus important to control for regional differences. Some of the sociodemographic differences may reflect our specific sample of transgender individuals (16) and may not be characteristic of all transgender individuals with acute psychiatric care utilization. Because they represented a clinical population, individuals in the samples were also more likely to have had prior outpatient visits than other transgender individuals, which may limit generalizability of findings. Prior outpatient visits for transgender individuals can include assessments to facilitate access to medical transition. These assessments may differentially contribute to the number of prior outpatient visits for transgender samples. However, these visits should have limited impact on other measures of prior mental health care. Matching likely did not remove all variation in mental illness severity between transgender and comparison groups, which may have also affected results. Because transgender status was based on self-report, some individuals may not have disclosed their gender identity and thus would have been excluded from the transgender sample. The comparison samples likely included transgender individuals who were not identified as part of the transgender samples. However, the vast majority of individuals who comprised the comparison samples were likely to be cisgender individuals (13, 15).

CONCLUSIONS

This study found that transgender individuals presenting for acute mental health care were more likely to experience marginalization than cisgender individuals and to present to acute care with different diagnostic patterns. More research is warranted into the experiences of transgender individuals presenting for acute mental health care and the factors associated with their presentation, particularly in regard to how experiences of marginalization and discrimination may play a role.

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